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NOTICE OF ALLOWANCE AND FEE(S) DUE

4743 7590 09/24/2009
MARSHALL, GERSTEIN & BORUN LLP
233 SOUTH WACKER DRIVE
6300 SEARS TOWER
CHICAGO, IL 60606-6357

EXAMINER	
BERNSHITEYN, MICHAEL	
ART UNIT	PAPER NUMBER
1796	

DATE MAILED: 09/24/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,892	04/24/2006	Dieter Hermeling	2982741952	7392

TITLE OF INVENTION: (METH)ACRYLIC ACID ESTERS OF UNSATURATED AMINOALCOHOLS AND PREPARATION THEREOF

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	12/24/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE** OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
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P.O. Box 1450
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

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Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop [ISSUE FEE] address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

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10/576,892	04/24/2006	Dieter Hermeling	2982741952	7392

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nonprovisional	NO	\$1510	\$300	\$0	\$1810	12/24/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
BERNSHTEYN, MICHAEL	1796	526-319000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____
Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.**

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Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 618 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 618 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability**Application No.**

10/576,892

Examiner

MICHAEL M. BERNSTEYN

Applicant(s)

HERMELING ET AL.

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/03/2009.
2. ☒ The allowed claim(s) is/are 1-8 and 10-18.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Michael M. Bernshteyn/
Examiner, Art Unit 1796

/David Wu/
Supervisory Patent Examiner, Art Unit 1796

DETAILED ACTION

1. This Office Action is a response to the remarks filed on August 3, 2009. No claims have been amended or cancelled; claims 13-18 have been added.
2. In view of remarks the rejections of claims 1-8 and 10-12 under 35 U.S.C. 103(a) as being unpatentable as obvious over Anchor et al. (U.S. Patent 5,478,883), Gruning et al. (U.S. Patent 6,268,521) in view of Witteler et al. (U.S. Patent Application Publication 2003/0091602), and Andre et al. (U.S. Patent Application 2003/0143908) have been withdrawn.
3. Claims 1-8 and 10-18 are pending.

Allowable Subject Matter

4. Claims 1-8 and 10-18 are allowed.
5. The following is a statement of reasons for the indication of allowable subject matter: the present claims are allowable over the closest references: Anchor et al. (U.S. Patent 5,478,883), Gruning et al. (U.S. Patent 6,268,521) and Andre et al. (U.S. Patent Application 2003/0143908).

Anchor discloses an improved emulsion polymerization process utilizing at least one substantially water-insoluble ethylenically unsaturated monomer is provided for forming discrete solid polymeric particles suitable for use in coating and/or adhesive applications. During at least the initial portion of the polymerization a dissolved water-soluble polymerizable surfactant (as defined) formed by the reaction of a diallylamine, ethylene oxide, and propylene oxide and/or butylene oxide additionally is provided in the

reaction zone in the continuous aqueous phase. The water-soluble polymerizable surfactant undergoes copolymerization and is substantially completely consumed during the course of the emulsion polymerization. The emulsion polymerization is carried out on a stable basis, there is no need to attempt to remove a surfactant at the conclusion of the emulsion polymerization, and the resulting polymeric particles are particularly well suited for coating and/or adhesive end uses where they form stable films and exhibit improved adhesion characteristics (abstract, Example 1, col. 7, line 42 through col. 9, line 20).

The water-soluble polymerizable ethylenically unsaturated surfactant undergoes copolymerization with other ethylenically unsaturated monomer present in said reaction zone and is substantially completely consumed during the course of the emulsion polymerization. The ethylenically unsaturated monomer or monomers which may be polymerized or copolymerized in accordance with the improved emulsion polymerization process of the present invention are well known in the art and are exemplified hereafter in a representative manner. For instance, suitable ethylenically unsaturated monomers are represented by, but not restricted to, mono- and polyunsaturated hydrocarbon monomers, vinyl esters (e.g., vinyl esters of C₁ to C₆ saturated monocarboxylic acids), vinyl ethers, monoethylenically unsaturated mono- and polycarboxylic acids and their alkyl esters (e.g., acrylic acid esters and methacrylic acid esters, particularly their C₁ to C₁₂ alkyl, and more particularly their C₁ to C₄ alkyl esters), the nitriles, vinyl and vinylidene halides, amides of unsaturated carboxylic acids, and amino monomers (col. 2, line 66 through col. 3, line 21).

The formed acrylic latex utilizing the specifically defined polymerizable surfactant derived from diallylamine, ethylene oxide, and propylene oxide exhibits superior electrolytic stability, coagulum, and water sensitivity values (col. 12, lines 51-55).

Gruning discloses a process for enzymatic preparation of acrylic esters and/or methacrylic esters of polyoxyalkylenes, and to the use thereof. The acryloyl and/or methacryloyl compounds of polyoxyalkylenes are obtainable by a process for esterifying or transesterifying acrylic and/or methacrylic acid or acrylic and/or methacrylic esters with a polyoxyalkylene of the general formula (I).

Andre discloses a modification of surface properties of particulate, linear, sheet-like, or three-dimensional structures using alkoxyated polyvinylamines, novel alkoxyated polyvinylamines, and also a process for their preparation (abstract).

Suitable comonomers B are monoethylenically unsaturated monomers, in particular vinyl esters of saturated carboxylic acids having from 1 to 6 carbon atoms, such as vinyl formate, vinyl acetate, vinyl propionate, and vinyl butyrate. Other suitable comonomers B are ethylenically unsaturated C₃ - C₆ carboxylic acids, such as acrylic acid, methacrylic acid, maleic acid, crotonic acid, itaconic acid, and vinylacetic acid, and also the corresponding alkali metal and alkaline earth metal salts, esters, amides, and nitriles, for example methyl acrylate, methyl methacrylate, ethyl acrylate, and ethyl methacrylate (page 2, [0030]). The obtained compounds are advantageously suitable for use in diapers, sanitary pads, cloths for cleaning, wiping or dishwashing, and serviettes, agricultural textiles, geotextiles, and also for filter applications (page 7, [0102]).

However, Anchor et al., Gruning et al. and Andre et al. do not disclose or fairly suggest (meth)acrylic esters of unsaturated aminoalcohols of general formula (I) as per instant claim 1 and a swellable hydrogel-forming polymer comprising a copolymerized internal crosslinker of general formula (I) as per instant claim 5, and particularly, the following combination of important features of the claimed (meth)acrylic esters: (a) the compounds are tertiary amine, (b) the compounds contain two different ethylenically unsaturated groups, i.e., an allyl group and an acryl group, (c) the compounds contain two or three ethylenically unsaturated groups in total, i.e., or can be zero, and (d) the compounds contain 2 to 100 alkyleneoxy A groups as per instant claims 1 and 5.

6. As of the date of this Notice of Allowability, the Examiner has not located or identified any reference that can be used singularly or in combination with another reference including Anchor et al., Gruning et al. and Andre et al. to render the present invention anticipated or obvious to one of ordinary skill in the art.

7. In the light of the above discussion, it is evident as to why the present claims are patentable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delay, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reason for Allowance".

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL M. BERNSHTEYN whose telephone number is (571)272-2411. The examiner can normally be reached on M-Th 8-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael M. Bernshteyn/
Examiner, Art Unit 1796

/M. M. B./
Examiner, Art Unit 1796

/David Wu/
Supervisory Patent Examiner, Art Unit 1796

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Art Unit: 1796

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